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RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/781,891D

DATE: 10/03/2002 P.6
TIME: 14:04:16

Input Set : A:\13381.txt
Output Set: N:\CRF4\10032002\I781891D.raw

```
 3 <110> APPLICANT: Delaney, William IV
 4        Locarnini, Stephen Alister
 5        Chen, Robert Yung Ming
 6        Bartholomeusz, Angeline
 7        Isom, Harriet
 9 <120> TITLE OF INVENTION: An assay
11 <130> FILE REFERENCE: 2378750/EJH
13 <140> CURRENT APPLICATION NUMBER: 09/781,891D
14 <141> CURRENT FILING DATE: 2001-02-02
16 <150> PRIOR APPLICATION NUMBER: 60/179,948
17 <151> PRIOR FILING DATE: 2000-02-03
19 <160> NUMBER OF SEQ ID NOS: 22
21 <170> SOFTWARE: PatentIn version 3.0
23 <210> SEQ ID NO: 1
24 <211> LENGTH: 23
25 <212> TYPE: DNA
26 <213> ORGANISM: Artificial Sequence
28 <220> FEATURE:
29 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
31 <400> SEQUENCE: 1
32 gcctcatttt gtgggtcacc ata                                        23
34 <210> SEQ ID NO: 2
35 <211> LENGTH: 20
36 <212> TYPE: DNA
37 <213> ORGANISM: Artificial Sequence
39 <220> FEATURE:
40 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
42 <400> SEQUENCE: 2
43 tctctgacat actttccaat                                            20
45 <210> SEQ ID NO: 3
46 <211> LENGTH: 18
47 <212> TYPE: DNA
48 <213> ORGANISM: Artificial Sequence
50 <220> FEATURE:
51 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
53 <400> SEQUENCE: 3
54 tgcacgattc ctgctcaa                                              18
56 <210> SEQ ID NO: 4
57 <211> LENGTH: 20
58 <212> TYPE: DNA
59 <213> ORGANISM: Artificial Sequence
61 <220> FEATURE:
62 <223> OTHER INFORMATION: Description of Artificial Sequence:Primer
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RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/781,891D   TIME: 14:04:16

Input Set : A:\13381.txt
Output Set: N:\CRF4\10032002\I781891D.raw

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65 tttctcaaag gtggagacag                                        20
67 <210> SEQ ID NO: 5
68 <211> LENGTH: 181
69 <212> TYPE: PRT
70 <213> ORGANISM: Artificial Sequence
72 <220> FEATURE:
73 <223> OTHER INFORMATION: Description of Artificial Sequence:Reference HBV
74       (Formula I)
76 <220> FEATURE:
77 <221> NAME/KEY: variant
78 <222> LOCATION: (2)..(2)
79 <223> OTHER INFORMATION: X = N or D
81 <220> FEATURE:
82 <221> NAME/KEY: variant
83 <222> LOCATION: (17)..(17)
84 <223> OTHER INFORMATION: X = I or P
86 <220> FEATURE:
87 <221> NAME/KEY: variant
88 <222> LOCATION: (29)..(29)
89 <223> OTHER INFORMATION: X = I or V
91 <220> FEATURE:
92 <221> NAME/KEY: variant
93 <222> LOCATION: (35)..(35)
94 <223> OTHER INFORMATION: X = S or D
96 <220> FEATURE:
97 <221> NAME/KEY: variant
98 <222> LOCATION: (44)..(44)
99 <223> OTHER INFORMATION: X = T or N
101 <220> FEATURE:
102 <221> NAME/KEY: variant
103 <222> LOCATION: (46)..(46)
104 <223> OTHER INFORMATION: X = R or N
106 <220> FEATURE:
107 <221> NAME/KEY: variant
108 <222> LOCATION: (47)..(47)
109 <223> OTHER INFORMATION: X = N or I
111 <220> FEATURE:
112 <221> NAME/KEY: variant
113 <222> LOCATION: (48)..(48)
114 <223> OTHER INFORMATION: X = any amino acid
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117 <221> NAME/KEY: variant
118 <222> LOCATION: (49)..(49)
119 <223> OTHER INFORMATION: X = N
121 <220> FEATURE:
122 <221> NAME/KEY: variant
123 <222> LOCATION: (50)..(50)
124 <223> OTHER INFORMATION: X = N or Y or H
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RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/781,891D   TIME: 14:04:16

Input Set : A:\13381.txt
Output Set: N:\CRF4\10032002\I781891D.raw

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129 <223> OTHER INFORMATION: X = H or Y
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133 <222> LOCATION: (53)..(53)
134 <223> OTHER INFORMATION: X = G or R
136 <220> FEATURE:
137 <221> NAME/KEY: variant
138 <222> LOCATION: (54)..(56)
139 <223> OTHER INFORMATION: X = any amino acid
141 <220> FEATURE:
142 <221> NAME/KEY: variant
143 <222> LOCATION: (57)..(57)
144 <223> OTHER INFORMATION: X = D or N
146 <220> FEATURE:
147 <221> NAME/KEY: variant
148 <222> LOCATION: (60)..(60)
149 <223> OTHER INFORMATION: X = D or N
151 <220> FEATURE:
152 <221> NAME/KEY: variant
153 <222> LOCATION: (61)..(61)
154 <223> OTHER INFORMATION: X = S or Y
156 <220> FEATURE:
157 <221> NAME/KEY: variant
158 <222> LOCATION: (65)..(65)
159 <223> OTHER INFORMATION: X = N or Q
161 <220> FEATURE:
162 <221> NAME/KEY: variant
163 <222> LOCATION: (71)..(71)
164 <223> OTHER INFORMATION: X = L or M
166 <220> FEATURE:
167 <221> NAME/KEY: variant
168 <222> LOCATION: (75)..(75)
169 <223> OTHER INFORMATION: X = K or Q
171 <220> FEATURE:
172 <221> NAME/KEY: variant
173 <222> LOCATION: (77)..(77)
174 <223> OTHER INFORMATION: X = Y or F
176 <220> FEATURE:
177 <221> NAME/KEY: variant
178 <222> LOCATION: (79)..(79)
179 <223> OTHER INFORMATION: X = R or W
181 <220> FEATURE:
182 <221> NAME/KEY: variant
183 <222> LOCATION: (84)..(84)
184 <223> OTHER INFORMATION: X = Y or L
186 <220> FEATURE:
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RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/781,891D   TIME: 14:04:16

Input Set : **A:\13381.txt**
Output Set: **N:\CRF4\10032002\I781891D.raw**

```
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188 <222> LOCATION: (85)..(85)
189 <223> OTHER INFORMATION: X = S or A
191 <220> FEATURE:
192 <221> NAME/KEY: variant
193 <222> LOCATION: (89)..(89)
194 <223> OTHER INFORMATION: X = I or V
196 <220> FEATURE:
197 <221> NAME/KEY: variant
198 <222> LOCATION: (95)..(95)
199 <223> OTHER INFORMATION: X = I or L
201 <220> FEATURE:
202 <221> NAME/KEY: variant
203 <222> LOCATION: (99)..(99)
204 <223> OTHER INFORMATION: X = V or G
206 <220> FEATURE:
207 <221> NAME/KEY: variant
208 <222> LOCATION: (114)..(114)
209 <223> OTHER INFORMATION: X = C or L
211 <220> FEATURE:
212 <221> NAME/KEY: variant
213 <222> LOCATION: (115)..(115)
214 <223> OTHER INFORMATION: X = A or S
216 <220> FEATURE:
217 <221> NAME/KEY: variant
218 <222> LOCATION: (116)..(116)
219 <223> OTHER INFORMATION: X = V or M
221 <220> FEATURE:
222 <221> NAME/KEY: variant
223 <222> LOCATION: (117)..(117)
224 <223> OTHER INFORMATION: X = V or T
226 <220> FEATURE:
227 <221> NAME/KEY: variant
228 <222> LOCATION: (118)..(118)
229 <223> OTHER INFORMATION: X = R or C
231 <220> FEATURE:
232 <221> NAME/KEY: variant
233 <222> LOCATION: (122)..(122)
234 <223> OTHER INFORMATION: X = F or P
236 <220> FEATURE:
237 <221> NAME/KEY: variant
238 <222> LOCATION: (125)..(125)
239 <223> OTHER INFORMATION: X = L or V
241 <220> FEATURE:
242 <221> NAME/KEY: variant
243 <222> LOCATION: (126)..(126)
244 <223> OTHER INFORMATION: X = A or V
246 <220> FEATURE:
247 <221> NAME/KEY: variant
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RAW SEQUENCE LISTING   DATE: 10/03/2002
PATENT APPLICATION: US/09/781,891D   TIME: 14:04:16

Input Set : A:\13381.txt
Output Set: N:\CRF4\10032002\I781891D.raw

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248 <222> LOCATION: (128)..(128)
249 <223> OTHER INFORMATION: X = S or A
251 <220> FEATURE:
252 <221> NAME/KEY: variant
253 <222> LOCATION: (133)..(133)
254 <223> OTHER INFORMATION: X = V or L or M
256 <220> FEATURE:
257 <221> NAME/KEY: variant
258 <222> LOCATION: (138)..(138)
259 <223> OTHER INFORMATION: X = K or R
261 <220> FEATURE:
262 <221> NAME/KEY: variant
263 <222> LOCATION: (139)..(139)
264 <223> OTHER INFORMATION: X = S or T
266 <220> FEATURE:
267 <221> NAME/KEY: variant
268 <222> LOCATION: (140)..(140)
269 <223> OTHER INFORMATION: X = V or G
271 <220> FEATURE:
272 <221> NAME/KEY: variant
273 <222> LOCATION: (141)..(141)
274 <223> OTHER INFORMATION: X = Q or E
276 <220> FEATURE:
277 <221> NAME/KEY: variant
278 <222> LOCATION: (143)..(143)
279 <223> OTHER INFORMATION: X = L or S or R
281 <220> FEATURE:
282 <221> NAME/KEY: variant
283 <222> LOCATION: (145)..(145)
284 <223> OTHER INFORMATION: X = S or F
286 <220> FEATURE:
287 <221> NAME/KEY: variant
288 <222> LOCATION: (147)..(147)
289 <223> OTHER INFORMATION: X = F or Y
291 <220> FEATURE:
292 <221> NAME/KEY: variant
293 <222> LOCATION: (148)..(148)
294 <223> OTHER INFORMATION: X = T or A
296 <220> FEATURE:
297 <221> NAME/KEY: variant
298 <222> LOCATION: (149)..(149)
299 <223> OTHER INFORMATION: X = A or S
301 <220> FEATURE:
302 <221> NAME/KEY: variant
303 <222> LOCATION: (150)..(150)
304 <223> OTHER INFORMATION: X = V or I
306 <220> FEATURE:
307 <221> NAME/KEY: variant
308 <222> LOCATION: (151)..(151)
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RAW SEQUENCE LISTING ERROR SUMMARY   DATE: 10/03/2002
PATENT APPLICATION: US/09/781,891D   TIME: 14:04:17

Input Set : A:\13381.txt
Output Set: N:\CRF4\10032002\I781891D.raw

<u>Please Note:</u>
Use of n and/or Xaa have been detected in the Sequence Listing. Please review the
Sequence Listing to ensure that a corresponding explanation is presented in the <220>
to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:5; Xaa Pos. 2,17,29,35,44,46,47,48,49,50,52,53,54,55,56,57,60,61,65,71
Seq#:5; Xaa Pos. 75,77,79,84,85,89,95,99,114,115,116,117,118,122,125,126
Seq#:5; Xaa Pos. 128,133,138,139,140,141,143,145,147,148,149,150,151,152
Seq#:5; Xaa Pos. 153,156,157,162,164,174,179
Seq#:6; Xaa Pos. 2,3,4,5,8,10,13,18,19,21,24,26,27,30,33,40,44,45,46,47,49
Seq#:6; Xaa Pos. 51,52,53,56,57,59,61,63,64,68,70,78,85,100,105,110,112,113
Seq#:6; Xaa Pos. 114,118,119,120,122,125,126,127,128,131,133,134,136,137
Seq#:6; Xaa Pos. 140,143,144,146,155,158,159,160,161,165,166,168,170,174
Seq#:6; Xaa Pos. 177,178,182,183,184,185,187,189,192,193,194,197,198,200
Seq#:6; Xaa Pos. 202,204,205,206,207,209,210,213,220,221,223,224,225
Seq#:7; Xaa Pos. 3,10,11,15,21,27,45,48,59,62,65,76,86,96,134,153,164,182
Seq#:7; Xaa Pos. 203,208,220,222,225,228,243,249,254
Seq#:8; Xaa Pos. 2,49,52,53,55,56,65,69,75,195,209,211,222

VERIFICATION SUMMARY   DATE: 10/03/2002
PATENT APPLICATION: US/09/781,891D   TIME: 14:04:17

Input Set : **A:\13381.txt**
Output Set: **N:\CRF4\10032002\I781891D.raw**

```
L:352 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:0
L:355 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:16
L:358 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:32
L:361 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:48
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:64
L:367 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:80
L:371 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:96
L:374 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:112
L:377 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:128
L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:144
L:383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:160
L:386 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:176
L:869 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0
L:872 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:16
L:875 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:32
L:878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:48
L:881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:64
L:884 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:80
L:887 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:96
L:890 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:112
L:893 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:128
L:896 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:144
L:899 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:160
L:902 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:176
L:905 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:192
L:908 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:208
L:911 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:224
L:1059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:0
L:1062 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:16
L:1065 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:32
L:1068 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:48
L:1071 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:64
L:1074 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:80
L:1083 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:128
L:1086 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:144
L:1089 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:160
L:1092 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:176
L:1095 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:192
L:1098 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:208
L:1101 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:224
L:1104 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:240
L:1181 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0
L:1191 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:48
L:1194 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:64
L:1218 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:192
L:1221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:208
```